SONY
TRINITRON® COLOR TV
KV-2093R/RM-735

US Model
Chassis No. SCC-648V-A

P3 CHASSIS

SCHEMATIC DIAGRAM

WARNING !!

AN ISOLATION TRANSFORMER SHOULD BE USED DURING ANY SERVICE TO AVOID POSSIBLE SHOCK HAZARD, BECAUSE OF LIVE CHASSIS.
THE CHASSIS OF THIS RECEIVER IS DIRECTLY CONNECTED TO THE AC POWER LINE.

SAFETY-RELATED COMPONENT WARNING !!

COMPONENTS IDENTIFIED BY SHADING AND MARK ⚠ ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY. CIRCUIT ADJUSTMENTS THAT ARE CRITICAL TO SAFE OPERATION ARE IDENTIFIED IN THIS MANUAL. FOLLOW THESE PROCEDURES WHENEVER CRITICAL COMPONENTS ARE REPLACED OR IMPROPER OPERATION IS SUSPECTED.

Note:

- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics.
- All resistors are in ohms, ¼W unless otherwise noted. k: 1000 Ω, M: 1000 kΩ
- (Chip) : nonflammable resistor.
- [ ] : panel designation.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- The components identified by ⚠ in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Select the resistance value according to SAFETY RELATED ADJUSTMENT.
- When replacing components identified by ◪, make the necessary adjustments indicated. If results do not meet the specified value, change the component identified by ⚠ and repeat the adjustment until the specified value is achieved. (Refer to R513 adjustment on page 7, 8.)
  When replacing the part in below table, be sure to perform the related adjustment.

Part replaced (◪)	Adjustment (⚠)
D504, D510, IC301, Q504, Q505, R507, R513, R514, R515, R517, R526, R537, R533, R559	R513 adjustment

- Voltages are dc with respect to ground unless otherwise noted.
- Readings are taken with a 10 MΩ digital multimeter.
- Readings are taken with a color-bar signal input.
- ▬▬ : B+ bus.
- ▬ ▬ : B− bus.
- Voltage variations may be noted due to normal production tolerances.
- ▭ : adjustment for repair.
- Voltages on A board are taken under conditions below.
  - o CH-13 (VHF HIGH) signal is received.
  - o VOLUME control is set to no sound position.
  - o PICTURE button is set to the normal position.
- The hold down check point is TP85.
- ⇨ : signal path.

Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

- ⚠ : selected to yield optimum performance.

CAUTION
This set is equipped with a polarized ac power cord plug (one blade of the plug is wider than the other). When replacing the ac power cord, be sure to connect it with specified part number as shown in this diagram.

CAUTION
When taking a broken fuse (F602) off, discharge across C602 to aboid shock hazard.

CAUTION
Be sure to connect the connector C-1 for safety.

CAUTION
When replacing IC651, be sure to check the test point voltage value (TP91). Refer to the Safety Adjustments Section.

CAUTION
When replacing FBT (T1503), be sure to check the HOLD DOWN check point voltage value. Refer to the Safety Adjustment Section of the Service Manual.

⊞ : See page 7 – 8.

A (P3 CONTROLLER, MEMORY, DISPLAY, D/A CONVERTER, AV AMP, CHROMA JUNGLE, DECODER, AUDIO CONTROLLER, NOISE REDUCT, TUNER, IF, SIF, DYNAMIC PICTURE, PURE FILTER, CUSTOMER CONTROL)

B (POWER SUPPLY, H.OUT, V.OUT, PIN MOD)

C (R-G-B OUT)

U1 (V/A/S ISOLATION, AUDIO/VIDEO SW)

U2 (ANT SW)

U3 (POWER SW)

T1 (INDICATOR)

T2 (DETECTOR)